

Finearc

Case study: Metal Fabrication

Application

- Arc welding plasma cutting

Products

- Customers in construction, aerospace, automotive and nuclear systems



Welding a strong partnership

For a country with more than 1.1 billion people, the increasing use of robots in welding and cutting applications indicates the growing demand for skilled manpower. Automation is clearly the way forward, the Indian company Finearc has decided.

➤ A decade back, a prediction that Indian industry would go in for robot automation systems due to labor scarcity would have raised eyebrows. But today, Pune, India-based Finearc Systems, a market leader in specialized welding applications, is turning to robots to manufacture a wide range of welding systems serving both Indian and foreign customers.

Ten years ago Finearc entered robotics. Now Finearc Managing Director S. S. Pathak predicts that with new avenues of profitable employment opening up in India absorbing the large workforce, robotics will play an increasingly important role in welding applications and systems. Pathak's son Rahul Pathak, manager of corporate services, is a great believer in using robots for welding applications.

Rahul Pathak says that ABB's strong global brand, a larger range of robots and a reputation for after-sales service and support steered the company into a global sales channel partnership with ABB. "Our second factory was coming up," he recalls. "We looked at ABB's robot applications for different industry segments such as aerospace, aviation and construction and realized it's a multibillion-dollar company with a global presence and would support us through teething problems."

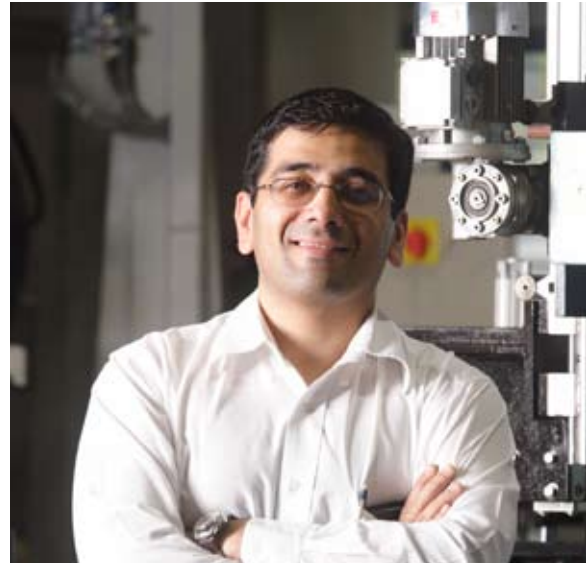
Finearc manufactures hard automated and robotic welding and cutting systems, and a wide variety of applications and solutions in different industry segments. The company's brand new factory is professionally run. "It is a team effort all the way," Rahul Pathak says of the family-run business. Pausing before a complicated system, he points out how the finished system would be used by a

Finearc

Case study: Metal Fabrication

“Buying a robot doesn’t end with the robot purchase. Training, installation, spare parts support are required, so the right partner is crucial.”

Rahul Pathak



major auto manufacturer (Toyota) to make instrument panel clusters for its automobiles. At the demo room in the company’s headquarters, a series of flawlessly welded auto exhaust systems are on display.

Pathak explains that at the Finearc factory, the robot is an arm that does arc welding and cutting, using multiple processes such as, for example, Mig, TIG and plasma. It not only eliminates and sometimes reduces human labor, but it can work in a hazardous environment such as excessive heat, and it provides flexibility. “More than reducing human error, the robot eliminates the inconsistency, moodiness and emotional swings associated with humans,” he says. “You can have controlled heat input, and in hazardous, intricate and demanding applications robots work better and more effectively.”

>FACTS

Advantage ABB

- Strong global brand with good local presence. “Nobody would ask, ‘Hey, why ABB?’” says Rahul Pathak, Finearc’s manager of corporate services.
- Wide range of robots offered by ABB, from a 3 kg to 500 kg payload capacity.
- Diverse applications covering more than arc welding. ABB can manage material handling, press transfer and a complete range of applications under the robotic industry segment.

Pathak says he is proud that Finearc has been chosen by ABB as a global partner. “We are miniscule in size, compared to this global giant, and we’re happy that ABB respects us, has confidence in us,” he says. “They’ve been very transparent and ready to cooperate.” But Pathak also knows his company’s strength. “Without drum beating, I’d say we are professionals, and ABB sees in us application knowledge and technology,” he says. “ABB makes robots; we make the entire application system. Both of us bring to the table what each needs to fulfill the end application.”

Deepak Chaturvedi, ABB India’s manager of sales and business partner development, says that in the global partners program he looks for machine manufacturers, line builders, jigs and fixture makers, specialists such as laser welders and gripper makers and so on. “Finearc is an established welding automation system maker for fixed stations and 2- to 3-axis welding automated solution providers,” he says. “Their innovative management ideas and technologically forward approach made them strong and long-term partners.”

ABB robots are known for accuracy, reliability and longevity in welding applications, he says. Finearc’s customer, a civil construction equipment manufacturer, wanted long reach and accurate welding robots. Against the robots offered by competition, the clincher was, says Chaturvedi, “our exact simulations using an offline simulation system running on the same software as in the Real IRC 5 Robot Controller. The cycle time displayed by our simulation was far superior and closer to the real process. This convinced the customer and Finearc.”